

6

DEMAND MANAGEMENT MEASURES

6.1 DEMAND MANAGEMENT MEASURE IMPLEMENTATION

Urban Water Management Planning Act Requirement:

10631 (f) (1) and (2)(Describe and provide a schedule of implementation for) each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following: (A) water survey programs for single-family residential and multifamily residential customers; (B) residential plumbing retrofit; (C) system water audits, leak detection, and repair; (D) metering with commodity rates for all new connections and retrofit of existing connections; (E) large landscape conservation programs and incentives; (F) high-efficiency washing machine rebate programs; (G) public information programs; (H) school education programs; (I) conservation programs for commercial, industrial, and institutional accounts; (J) wholesale agency programs; (K) conservation pricing; (L) water conservation coordinator; (M) water waste prohibition; (N) residential ultra-low-flush toilet replacement programs

10631 (f)(3)A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented, or described under the plan

10631 (f)(4)).An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand

10631 (g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following: (1) take into account economic and noneconomic factors, including environmental, social, health customer impact,

and technological factors; (2) Include a cost-benefit analysis, identifying total benefits and total costs; (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost; (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation

The City of Huntington Park works with the Central Basin Municipal Water District (CBMWD) to implement water conservation techniques to reduce the total demand of water throughout the City and CBMWD. Together, the City and CBMWD implement the 13 required Demand Management Measures (DMMs) within the City (DMM 10 is not required as the City is not a wholesale agency). CBMWD was an early signatory to the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding (MOU) regarding Urban Water Conservation in California. CUWCC represents a diverse group of water supply agencies dedicated to establishing guidelines toward implementing conservation measures and managing supply demands. The following table summarizes the BMPs/DMMs:

Table 6.1.1 CUWCC BMP Organization and Names (2009 MOU) and UWMP DMMs					
Type	Category	BMP #	BMP Name	DMM #	DMM Name
Foundational	Operations Practices	1.1.1	Conservation Coordinator	12	Water Conservation Coordinator
		1.1.2	Water Waste Prevention	13	Water Waste Prohibition
		1.1.3	Wholesale Agency Assistance Programs	10	Wholesale Agency Programs
		1.2	Water Loss Control	3	System Water Audits, Leak Detection, and Repair

Table 6.1.1
CUWCC BMP Organization and Names (2009 MOU) and UWMP DMMs

Type	Category	BMP #	BMP Name	DMM #	DMM Name
		1.3	Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections	4	Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections
		1.4	Retail Conservation Pricing	11	Conservation Pricing
	Education Programs	2.1	Public Information Programs	7	Public Information Programs
		2.2	School Education Programs	8	School Education Programs
Programmatic	Residential	3.1	Residential Assistance Program	1	Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers
				2	Residential Plumbing Retrofit
		3.2	Landscape Water Survey	1	Water Survey Programs for Single-Family Residential and Multifamily Residential Customers
		3.3	High-Efficiency Clothes Washing Machine, Financial Incentive Programs	6	High-Efficiency Washing Machine Rebate Programs

Table 6.1.1
CUWCC BMP Organization and Names (2009 MOU) and UWMP DMMs

Type	Category	BMP #	BMP Name	DMM #	DMM Name
		3.4	WaterSense Specification (WSS) toilets	14	Residential Ultra-Low-Flush Toilet Replacement Programs
	Commercial, Industrial, and Institutional	4	Commercial, Industrial, and Institutional	9	Conservation Programs for Commercial, Industrial, and Institutional Accounts
	Landscape	5	Landscape	5	Large Landscape Conservation Programs and Incentives

6.2 OPERATIONS PRACTICES

6.2.1 Water Conservation Coordinator (DMM 12)

Staff Analyst, Christina Dixon, functions as the water conservation coordinator. Ms. Dixon works closely with the CBMWD, WRD and MWD on various special projects and represents the City at local, regional, and statewide workshops and organizations. In addition she promotes water conservation within the community to both business and residential customers. Her contact information is below:

Name: Christina Dixon
 Title: Staff Analyst
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 Phone: (323) 584-6323
 E-mail: Cdixon@huntingtonpark.org

The City has historically had a part-time Water Conservation Coordinator. The below table outlines the staff allocations and actual/projected expenditures the City will allocate for their water conservation coordinator duties through 2015.

Table 6.2.1
Water Conservation Coordinator Staff Time and Expenditure

Year	2006	2007	2008	2009	2010
Number of Part-Time Staff	0.31	0.31	0.31	0.31	0.31
Actual Expenditures	\$61,800	\$85,800	\$95,800	\$119,700	\$113,600
Year	2011	2012	2013	2014	2015
Number of Part-Time Staff	0.31	0.31	0.31	0.31	0.31
Projected Expenditures	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

6.2.2 Water Waste Prohibition (DMM 13)

According to Ordinance No. 513-NS during times of drought, it is unlawful to facilitate water waste. There are consequences for this type of behavior to the property owner. During years of normal precipitation, the public is urged to conserve and implement wise water use. See Appendix G: Mandatory Water Conservation Ordinance (Ordinance 513-NS).

6.2.3 Wholesale Agency Programs (DMM 10)

This DMM is not required as the City is not a wholesale agency.

6.2.4 System Water Audits, Leak Detection, and Repair (DMM 3)

In the 1930s and 1940s, Huntington Park initiated a potable water system. The system that exists today was completed in the 1950s. Most of the system has been in service for seventy-five years and is quickly approaching the normal “service life”. City Council and City Staff have asked for a review of potential leaks in the water delivery system. To further this cause, the City made application to the Department of Water Resources (DWR) seeking a grant to conduct a water line leak and location analysis, water tank inspection and structural analysis for three of the system’s water reservoirs. The City Council approved Resolution 2002-90 on December 16, 2002 authorizing the City’s application for the DWR grant. This application was completed and sent to DWR for consideration on December 30, 2002. Assemblyman Marco Antonio Firebaugh

notified the City that WRD had awarded the grant to the City for the Infrastructure Rehabilitation Program through the Safe Drinking Water, Clean Water Watershed Protection, and Flood Protection Act (Proposition 13). Huntington Park was one of eight agencies selected as a grant recipient. On October 20, 2003 the City Council adopted Resolution 2003-87 to accept the grant. On March 18, 2004, a contract, “Infrastructure Rehabilitation Grant Contract F68011” was executed between DWR and the City. The study had two objectives: 1. Determine leakage or loss of water from the water line distribution system. Earlier attempts to determine the water distribution system leakage indicated that there may be substantial water loss, however the results were inclusive. A total of 47.34 miles of water lines were to be surveyed, including all points where the water lines intersect. 2. Determine the structural condition of three water reservoirs. Earlier observations indicate that these reservoirs possibly have structural deficiencies.

The City has the ability to perform a system audit of its potable water system to determine the need for a full-scale system audit. The system audit is performed by tracking the actual metered water use, which can be compared to total well production. Production is tracked monthly and reviewed annually to determine if the system exhibits significant losses. Full scale system audits are performed on an as-needed basis.

Using 2010 data, verifiable use as a percent of total production is calculated comparing actual metered sales against total supply into the system as measured at the wellhead meters. Based upon this data, the City has approximately 5% loss in their system, which did not require the implementation of system audits.

6.2.5 Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections (DMM 4)

Part of DMM 4 includes the retrofitting of existing metered connections. The City estimates that there are no unmetered connections within the City limits since there has never been a flat rate charged for water use within any sector. Additionally, every ten years meters are changed out (life of a meter). Therefore, no program for retrofitting existing unmetered connections is identified. The City currently bills its retail customers according to meter consumption. The City requires meters for all new connections and bills by volume-of-use.

6.2.6 Conservation Pricing (DMM 11)

The City purchases imported water from CBMWD at a two-tiered rate structure. This rate structure promotes water conservation and regional supply reliability. The City is committed to a voluntary purchase agreement with CBMWD which outlines the amount of water to be purchased at a Tier 1 rate and the cost of the Tier 2 rate for water purchases that exceed the Tier 1 allotment. The table below shows the current rate structure. Note that 1 unit is equivalent to 748 gallons.

Table 6.2.2 Current Rate Structure		
Account Type	Flat Rate Per User	Rate Per Unit
Base Rate	\$10.00	N/A
Refuse	\$44.64	N/A
Solid Waste	\$1.56	N/A
Water Usage	N/A	\$1.69
Sewer	N/A	\$0.15
Water Maintenance	N/A	\$0.19

Additionally, the City plans to incorporate a tiered rate structure to promote water conservation by the end of 2011.

6.3 EDUCATION PROGRAMS

6.3.1 Public Information Programs (DMM 7)

The City and CBMWD work together to raise public awareness regarding many different issues regarding water and water supply. These issues include information pertaining to runoff pollution, water quality, and water conservation. The City and CBMWD have several ways of educating the public about these broad topics that ultimately pertain to water use by the City customers.

The City has initiated several projects to reach the public with information on water conservation. At intervals, water conservation inserts are sent out with the water bills with a chart showing water usage in comparison to the previous year's usage to encourage reduction. The Rental Housing Enhancement Program educational outreach programs feature a piece on water conservation which is accomplished in cooperation with the Old Timer's Association. Articles are placed in the Huntington Park newsletter, "the Spectrum", regarding various water conservation incentive programs. Brochures are also distributed at community events. Building inspectors provide brochures on conservation rebate programs to the building owners. Brochures are also available at the Building and Safety and Planning counters in City Hall.

Through its membership in CBMWD, the City is active in the California Water Awareness Campaign (CWAC), which is an association formed several years ago to coordinate efforts throughout the state during "May is Water Awareness Month". With this effort, water agencies throughout the state, large and small, can tap into a large pool of knowledge and materials to promote a water awareness message not only in May, but throughout the year. The following tables provide the implementation schedule and actual/projected expenditures of certain of the above-listed conservation efforts through 2015:

Table 6.3.1 Public Information Actual Expenditures					
Program	2006	2007	2008	2009	2010
Bill Inserts/Newsletters/Brochures	X	X	X	X	X
Demonstration Gardens					
Special Events/Media Events					
Program to Coordinate with other government agencies, industry and public interest groups and media					
Actual Expenditures	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500

Table 6.3.2
Public Information Projected Expenditures

Program	2011	2012	2013	2014	2015
Bill Inserts/Newsletters/Brochures	X	X	X	X	X
Demonstration Gardens	X	X	X	X	X
Special Events/Media Events					
Program to Coordinate with other government agencies, industry and public interest groups and media					
Projected Expenditures	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700

6.3.2 School Education Programs (DMM 8)

Water and environmental education are critical components of an effective outreach strategy. CBMWD offers a variety of elementary through high school programs free of charge to all schools within the City's service area. The following list shows the educational programs offered by CBMWD:

- Water Squad Investigations (Grades 4-12)
- Water Wanderings (Grades 4-5)
- Think Watershed (Grades 4-6)
- Think Earth! It's Magic (Grades K-5)
- Think Water! It's Magic (After School Program for Grades K-5)
- "Water is Life" Poster Contest (Grades 4-8)
- Waterlogged (Grades 9-12)
- Sewer Science (Grades 9-12)
- Conservation Connection: Water & Energy in Southern California (Grades 5-8)
- Water for the City: Southern California Urban Water Cycle (Grades 4-8)

6.4 RESIDENTIAL PROGRAMS

6.4.1 Water Survey Programs for Residential Customers (DMM 1)

The City has approved the “Residential Pre-sale Inspection Report Program”, Title 8 Building Regulations, Chapter 17, which assures potential property owners that the residence they will acquire is in substantial compliance with the City’s housing, building and zoning codes. This includes health and safety issues concerning plumbing irregularities, water leaks and any deterioration caused by water issues.

Additionally, the City has also approved the “Rental Housing Enhancement Program”, Title 8 Building Regulations, Chapter 18. This ongoing inspection program divides the City into quadrants and surveys rental properties for code violations. This includes plumbing irregularities, water leaks, deterioration caused by water issues and irrigation violations. Property owners and tenants are notified of the upcoming inspections, and a building inspector visits the properties to survey any violations. An educational outreach by a community-based organization will inform the tenants about the upcoming survey inspections and encourage water conservation as part of the program.

Residential surveys evaluate all the water-using devices inside the home such as toilets, faucets, showerheads, etc. A trained surveyor checks for leaks and tests the flows indoor and outdoor. Once the survey is completed, recommendations are provided for retrofitting certain water use devices, and educational materials are also supplied to the resident. Residential surveys provide the City with a great opportunity to provide their customers with a program that offers customer outreach opportunities. Residential surveys are available upon request; however, no residents within the City have taken advantage of the program within the past five years.

Table 6.4.1
Surveys for Single and Multi-Families

Year	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10
Surveys Completed	0	0	0	0	0

Additionally, the City offers a pre-sale walkthrough for residential real estate within the City to evaluate the water system, including faucets, shower heads, and the functionality of shut-off valves.

6.4.2 Residential Plumbing Retrofit (DMM 2)

Plumbing irregularities cited in the two programs mentioned above will cause the property owner to retrofit any violations. Monthly reports are generated to help identify specific water leakage and plumbing retrofits. The City also participates in any plumbing retrofit programs offered by the CBMWD. Residential plumbing retrofitting includes the distribution and installation of low-flow showerheads, ultra-low flow toilets, and faucet aerators. The City and CBMWD distributes retrofit equipment to customers upon request. Availability of conservation devices are also promoted within City publication. Although the City of Huntington Park has distributed residential plumbing retrofit devices, the record keeping for the program has not been maintained and specific numbers are not available as part of the Urban Water Management Plan.

6.4.3 High Efficiency Washing Machine Rebate Programs (DMM 6)

As a member agency of CBMWD, the City participates in CBMWD's High-Efficiency Clothes Washer (HECW) Program. This program has exceeded all expectations and continues to be one of CBMWD's more successful programs. When the HECWs first hit the market, the devices were quite expensive but market demand has helped to drive the price down. The new HECWs cost twice as much as regular inefficient models, but by providing a \$100 rebate (along with other utility/store incentives); consumers are choosing to purchase the new HECWs. The HECWs also have other benefits; not only do they save 50% water but also save 60% electricity and use less detergent. Three businesses took advantage of the program; two coin laundries and a multiple-family apartment complex. Thirty four washers were installed with an annual water savings of 3.85 AF. Since the life of the washers totals approximately eight years, the anticipated lifetime savings totals 31.84 AF.

Table 6.4.2 illustrates the number of rebates distributed to City of Huntington Park customers cumulatively since the rebate program was initiated.

Table 6.4.2 High-Efficiency Washing Machine Rebate Summary					
Year	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10
Rebates Given	34	34	34	34	34

6.4.4 Residential ULFT Replacement Programs (DMM 14)

The City participates in CBMWD's Ultra-Low Flush Toilet (ULFT) Program. Technology standards have replaced the 1.6 gpf ULFT with High-Efficiency 1.28 gpf Toilets (HET). Today, CBMWD only distributes HETs.

HETs have been a key element in the conservation success CBMWD has experienced over the years. Free HET distribution events have provided thousands of free toilets to local residents throughout CBMWD's service area. Since 2005, CBMWD has completed more than 5,000 HET installations in single family, multifamily and commercial, industrial and institutional facilities throughout CBMWD's service area. CBMWD receives requests to participate in various local partnerships to provide disadvantaged residents with HETs. CBMWD's service area is home to many disadvantaged residents and the need for free, water conserving toilets remains high. Given the current economic state, the conservation coordinator for CBMWD is focusing attention on securing additional sources of funding to make HET programs possible.

In 2001 two households participated with 3 toilets replaced. In 2002, 508 households participated with 713 toilets replaced. In 2003, one household participated with one toilet replaced. Lastly, in 2004, 361 single and multi family households participated with 576 toilets replaced. Over four years, 1,294 regular-flush toilets were replaced with ultra low-flow toilets. Although the City of Huntington Park has distributed HETs in the service area, the record keeping for the program has not been maintained over the past five years and additional specific numbers are not available as part of the Urban Water Management Plan.

Table 6.4.3 illustrates the number of toilets replaced by the City of Huntington Park customers cumulatively since the program was initiated.

Table 6.4.3 High-Efficiency Toilet Rebate Summary					
Year	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10
Rebates Given	1,294	1,294	1,294	1,294	1,294

6.5 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL PROGRAMS

6.5.1 Commercial, Industrial, and Institutional Programs (DMM 9)

The City and CBMWD have programs for those who use industrial washing machines; for example, at apartment complexes and commercial coin laundries. Rebates are offered for commercial clothes washers, waterbrooms, cooling tower conductivity controllers, pre-rinse spray nozzles, x-ray machine recirculating devices and commercial toilets and urinals. In addition, car washes are required by law to recycle their water use to save water. One car wash within the City has participated in water conservation efforts and retrofits.

6.6 LANDSCAPE PROGRAMS

6.6.1 Large Landscape Conservation Programs and Incentives (DMM 5)

There are no large blocks of land available for development within the City. Any free land will most likely go toward multi-family housing or commercial development if it is near a major arterial water supply. Currently a city park, Salt Lake Park, is irrigated with reclaimed water. This park is conveniently located near a recycled water receptor and this has enabled Huntington Park to use recycled water to aid in the conservation cause. Other city parks are too far from the reclaimed water artery to share in the beneficial use of reclaimed water.

The City is working along with CBMWD to reduce demand for water for irrigation purposes by providing recycled water in its service area. In addition to the MWD's region-wide "SoCal Water\$mart" and "Save A Buck" rebate programs, CBMWD also offers various large landscape conservation programs including:

- A District-wide large landscape managed irrigation program, incorporating maintenance, monitoring and tracking of individual property water savings
- Federal and State grants providing over 2,000 smart controllers to residential and commercial customers
- A city partnership program to install Smart Irrigation Controllers in park and street medians
- A commercial landscape research grant to improve water use efficiency at schools, parks and open public spaces
- The City of Huntington Park has implemented a drought tolerant demonstration garden